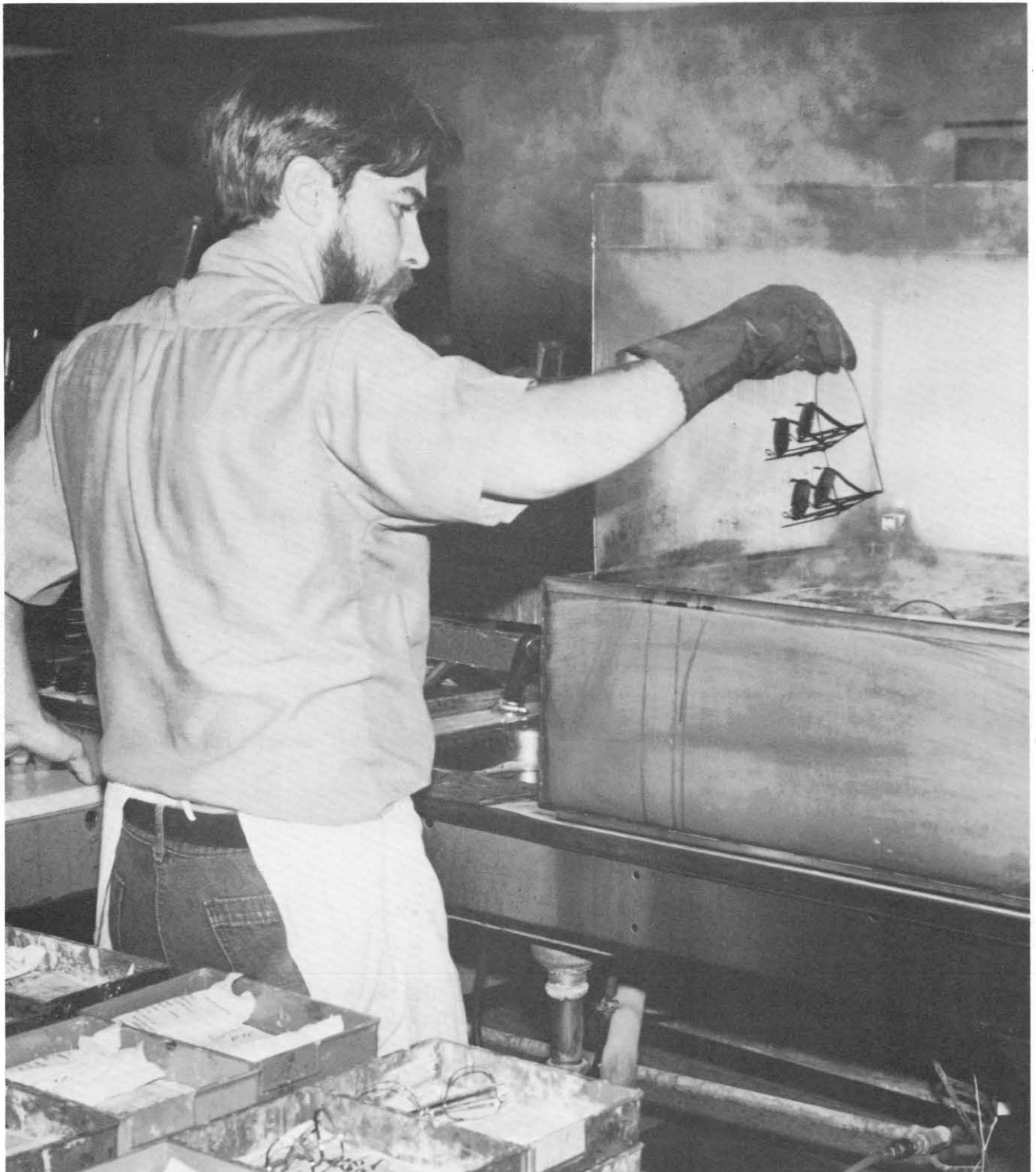


U.S. NAVY MEDICINE

February 1981



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COVER: HM2 Gerald Price removes lenses from potassium chloride tinting solution at the Naval Ophthalmic Support and Training Activity in Yorktown, VA. Story on page 14. Photo by Walter Becknell.

DEPARTMENT ROUNDS

Hospital Corpsman Finds Medicine and Murky Water Challenging

Five years ago, HM2 Terrence Kayser treated victims of near drownings, coral abrasions, and shark bite. Today, the former Miami Beach lifeguard is a highly skilled Navy medical diver assigned aboard a Seventh Fleet rescue salvage ship, which recently concluded a six-month deployment to the western Pacific.

If a job is rugged or uncommon to others, "Doc" Kayser thrives on it. "If a job presents a challenge then I

want it," said the second class hospital corpsman. "And every job I've undertaken while responsible for this position has been just that."

Besides going down to depths of 300 feet in deep-sea diving equipment, Kayser and 13 other shipmates on board the rescue salvage ship, USS *Reclaimer* are qualified scuba and shallow water divers. They operate in a murky world where a man must move cautiously and carry with him the oxygen and

life-sustaining elements of his own environment. They venture beneath the sea for many purposes—search and rescue, underwater survey, and inspection and repair of damaged ship hulls. They also assist with oceanographic projects.

In addition to his diving responsibilities, the 31-year-old Florida native has a rigorous daily routine which includes sick call, sanitation inspections, water testing, and medical reports. But he admits that for him, paperwork is the hardest aspect of his job.

Kayser is tops, not only as a corpsman, but a diver as well, according to the senior diver on board this 93-man ship, Senior Chief Tom Berry. "He's a relatively new diver, but he's up there with the best," said Berry. "After only 18 months of diving he is qualified in all phases."

Kayser admits that his previous experience in medicine as a lifeguard and his water background is what prompted him to join the Navy and become a medical diver. "As a lifeguard, I learned first aid and lifesaving. I treated people for problems ranging from minor scratches and abrasions to serious injuries caused by Portuguese men-of-war.

Enlisting in the Navy in September 1975, Kayser attended hospital corpsman school in San Diego, CA. Before reporting to *Reclaimer* in November 1979, he completed the



"Doc" Kayser and one of his patients



When not involved in a dive, Kayser operates the work-safety boat as his shipmates comb the deep-sea world of King Neptune. USS Reclaimer is in the background.

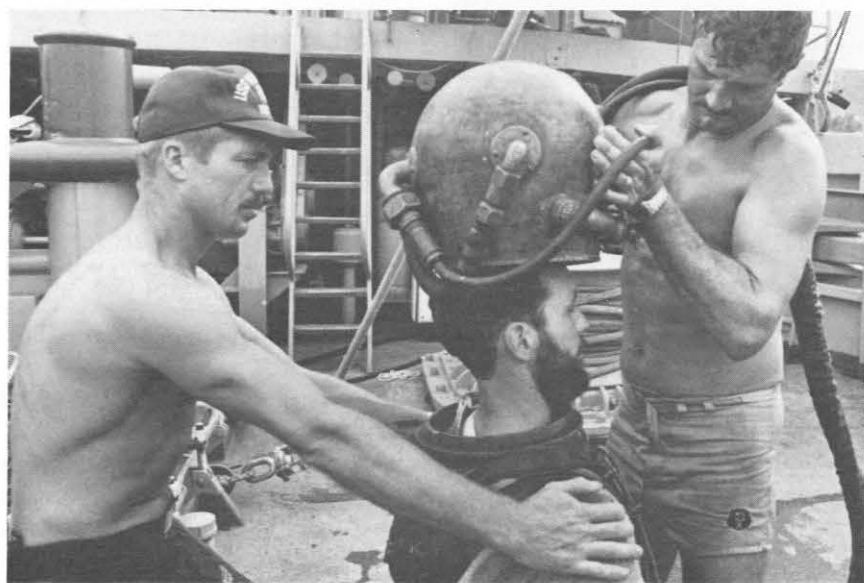
Navy's demanding first and second class deep-sea diving schools. In addition, *Reclaimer's* sole corpsman received 14 weeks of training in diving medicine.

Kayser is proud of the rapport he's established with his shipmates. "It's the most important part of my job," he said. "Without rapport with my co-workers, I'd be lost. A smile on a man's face is important to me. The men believe in me, not only medically, but look to me for counseling as well. And that's gratifying. Each individual has to be handled differently. How I approach a patient is equally important. I'm aggressive with my treatment in certain situations, yet I'm sympathetic."

The highlight of the Navy veteran's five-year career occurred during *Reclaimer's* recent visit to the South Pacific where he distributed medical supplies and treated natives of 11 islands of the Trust Territory of the Pacific, including residents of Truk and Yap. "I wanted to do more for the inhabitants, but time and supplies would't allow it," said Kayser. "On some islands I treated a dozen or more people, on others only one or two. Many of the natives were hesitant about accepting my medicine. Some still believe in witch doctors."

After retirement, Kayser hopes someday to sail to infrequently visited islands, like the Trust Territory of the Pacific Islands, and assist the natives with medical problems and education. "We can give those people all the medical supplies in the world, but without proper knowledge on how to use it, it's useless," said Kayser. "It will be a good challenge."

—Story and photos by PHC Ken A. George, USN □



HM2 Kayser steadies a Reclaimer diver as shipmate Sam Nance attaches the heavy Mark V hard hat to the bulky deep-sea diving rig during salvage operations in the western Pacific.

The Medical Service Corps Officer Survey: Who Responded?

LCDR Paul T. Bruder, MSC, USN
LT Mark C. Butler, MSC, USN

In April 1980, MSC officers worldwide participated in a survey designed to assess attitudes and aspirations pertinent to their naval careers. Following many months of preparation, with reviews by MSC Specialty Advisors and the MSC Division (BUMED), a mail questionnaire was sent to each of the 1,849 MSC officers on active duty at that time. The substance of the questionnaire pertained to the officers' occupations, their particular jobs and the environments in which they are performed, and to their personal interests as well as family needs. The officers' opinions about different types of assignments, training, and other related career development issues were also sought. This article is the first in a series to be published in U.S. Navy Medicine during the months ahead in which profiles of opinion derived from that survey will be highlighted and discussed.

The keen interest among MSC officers in matters of career development and professional growth is reflected in the 75 percent response rate to the survey, a substantial return under mail question-

naire survey procedures. Those who responded did so in a most thorough manner; all but one percent of the returned questionnaires being completely filled out. They were also highly representative of the MSC population on parameters of officer rank structure, gender (seven percent female), and general professional function within health service administration, science, and clinical care. On rank, about 56 percent of all MSC officers (and 55 percent of the survey participants) were at that time in grades 0-1 through 0-3. Similarly proportionate to corps

strength, 31 percent of the respondent sample were of 0-4 grade, with the remaining 14 percent in grades 0-5 through 0-6.

Related, although imperfectly, to rank is the professional experience structure of the officers, indicated in another way by years of commissioned service. The amount of commissioned service is an especially important parameter for the MSC officer community. All naval officer communities are sensitive to the career decisions regarding augmentation and the later 20-year commissioned service decision with respect

TABLE 1. Description of MSC Survey Participants by Categories of Officer Experience Level in Relation to Age, Education, and Marital Status

	Officer Experience Level*			
	Junior	Middle	Senior	Total
Number of survey participants	673	482	231	1,386
Avg age (yrs) of participants	31.4	36.8	43.6	35.3
Mdn age (yrs) of participants	32	37	44	35
% with some college	3	8	7	5
% with Bachelor's degree	36	34	32	35
% with Master's degree	37	43	41	40
% with Doctoral degree	24	15	20	20
% of participants married	75	90	90	83

*Categories of officer experience level are: *Junior* (< 6 yrs commissioned service); *Middle* (7-12 yrs commissioned service); *Senior* (> 13 yrs commissioned service)

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TABLE 2. Numbers of MSC Survey Participants Categorized by Officer Experience Level in Relation to Their Currently Held Positions of Organization Administrative Responsibility

Position in Organization	Officer Experience Level			
	Junior	Middle	Senior	Total
Staff Officer (Misc.)	217	107	41	365
Chief of Service	133	129	32	294
Branch/Section Head	107	65	33	205
Division Head	50	22	15	87
Director of Administrative Services	3	29	31	63
CO/OIC/XO	6	21	25	52
Total*	516	373	177	1,066

*Slightly more than one-fifth of the 1,386 survey respondents were not in organizational positions with traditional titles depicting administrative responsibility. This was uniformly so across the three categories of officer experience level.

to continuation or retirement. But the MSC has been additionally sensitive to retirement eligibility among a considerable number of its officers (notably those in health care administration) who have 20 or more years of total active service, of which only 10 years are as commissioned officers. The design of the present survey, therefore, focused on three major career decision phases or officer experience levels. The first we refer to as the *junior (grade)* officer level defined in this study as the first six years of commissioned service (equivalent approximately to grades 0-1/0-3). The second, or *middle (grade)* officer, is that defined here as 7 to 12 years of commissioned service (predominately the 0-4 grade). And the *senior (grade)* officer level is that defined in this study as 13 or more years of commissioned service (or, for the most part, the 0-5/0-6 grades). Table 1 provides a brief description of those three officer experience groups in terms of age,

education, and marital status, each of which in its own right is another potentially significant variable in career decisions. With the exception of age differences to be expected, there is notable demographic similarity between the three experience groups.

By broad area of professional function, slightly less than half of all MSC officers are by education and experience in the field of health care administration. Among the survey respondents, 46 percent were of that profession. There are, of course, several subspecialties even within health care administration, not to mention the many different science and clinical professions, which constitute the remainder of the MSC (and 54 percent of the survey participants). Across all professional areas, the officers who returned their survey questionnaires identified with no fewer than 48 occupational specialties. Although many, if not most, analyses of career attitudes and decisions can

undoubtedly be made within the context of broad functional categories of profession in health service administration, science, and clinical care, some sensitivity must be maintained nevertheless to possible differences between so many specialties even within the same general functional category. Certainly, alternative opportunities can be expected to vary over time and across individuals, with striking differences between related but different professions. Those can be critical matters in deciding about a naval career.

Corresponding to the diversity of professional function is the variety in duty assignment among MSC officers. Proportionate to the billet structure of their corps, the majority of officers who participated in the survey were assigned at the time to direct health care facilities ranging in size and scope from clinic to regional center (about 62 percent of the respondents); by contrast, the smallest number were in headquarters and field command staff assignments (about six percent). Others were in assignments in support of the Medical Department mission through research and development, education and training, and occupational health and preventive medicine programs (about 15 percent). The balance of those participating in the survey (17 percent) were MSC officers assigned to the operational forces or to line commands in support thereof. Among all survey respondents, 12 percent were in overseas assignments.

Across those duty assignments, the officers participating in the survey represented a complete spectrum of different organizational positions of administrative responsibility, numerically described in Table 2. The data are presented to show relationship of organizational position to categories of officer ex-

perience level as previously defined in this study. Positions reportedly held by the survey participants are listed in order of overall frequency of response. Though the same position titles are employed for officers of the three experience levels, they pertain in most instances to different jobs or types and degrees of responsibility. What they suggest, nonetheless, are the variable levels of administrative and supervisory opportunity for officers of all experience levels and professional specialties in the Medical Service Corps.

In summary, the high rate of survey response with correspondingly representative quality of those who participated, relative to the population of officers surveyed, assures reliability of the survey results for management use. Indeed, the essential reason for the present survey was to develop an attitudinal base descriptive of MSC officers

with which to supplement other information in the process of officer career planning for that corps. The career planning and counseling process must occur at levels of the field command as well as at headquarters. Survey methodology can be a useful management tool in such endeavors. In that vein the series of articles to be forthcoming will afford survey feedback to field and headquarters staff, alike.

In future articles, attention will be given to survey results pertinent to such topics as:

- Attitudes toward operational assignments and when they are best staged in a career
- Relationship between an individual's commitment to the organization and to his or her professional occupation
- Attitudes toward professional specialization and generalization over the course of a career

- Job satisfaction and relationship of personal and professional concerns and interests to life or career stages
- Perceptions of career opportunity in relation to location in organization and professional role

Officers having an especially strong interest in any other particular aspect of career development, about which the present survey might shed some light, are encouraged to notify either of the authors if they haven't done so already. In that way, other short articles can be prepared on topics of sufficient interest.

For those who have participated, your cooperation has been most genuinely appreciated. For all, we hope this series of articles will be of value in stimulating further thought, lively discussion, and more effective planning of naval careers for MSC officers. □

New Master Chief Petty Officer of the Force

HMCN Stephen W. Brown, USN, was recently selected as the Medical Department's Master Chief Petty Officer of the Force by the Surgeon General of the U.S. Navy, VADM J. William Cox, MC, USN.

Master Chief Brown has been serving as Director, Hospital Corps Division, Bureau of Medicine and Surgery, since his appointment in June 1979. He holds the distinctive honor of being the first enlisted director of the division.

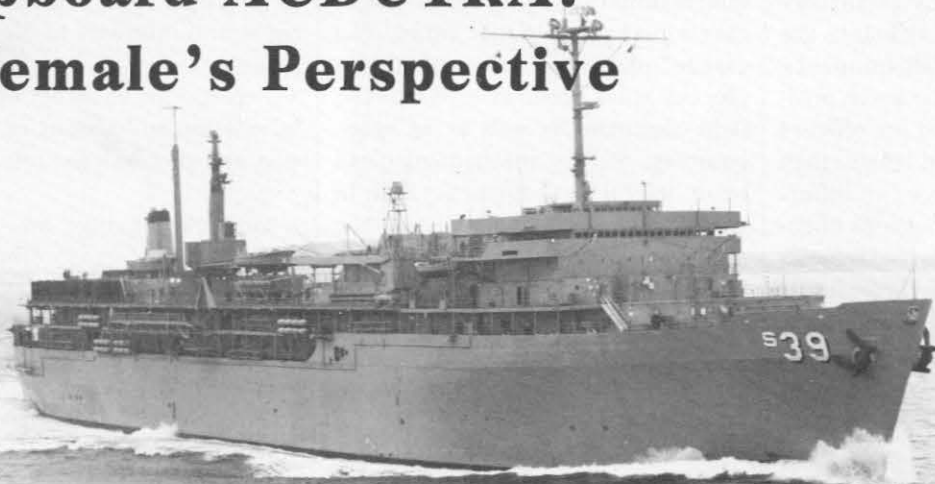
As Director of the Hospital Corps Division, HMCN Brown was responsible for the overall management of enlisted medical personnel resources, enlisted training programs, and advising the Surgeon General and senior medical department staff on Medical Department issues and policies affecting the enlisted communities.

HMCN Brown assumed his new duties 1 Feb 1981 and is the personal advisor to the Surgeon General on Medical Department policies affecting all enlisted members of the Medical Department throughout the Navy. His new responsibilities will mean traveling often to meet with the enlisted communities worldwide.



HMCN Brown

Shipboard ACDUTRA: A Female's Perspective



USS Emory S. Land

When I first stepped onto the quarterdeck of USS *Emory S. Land*, I could feel the eyes staring at me. "You're reporting for active duty?" they asked, not even attempting to hide their disbelief. Obviously, they were sure that I didn't belong there, that I was confused or lost. But I did belong there. More than once I had to convince the pier sentry to look more closely at my identification. And he would again tell me patiently that dependents are not allowed on the ship past 10 p.m. But I'm not a dependent. My ID clearly shows that I am a commissioned ensign in the U.S. Navy Reserves. What is it about me then, that caused the stares, the double takes, the disbelief? Very simply, I am female, one of very few females stationed aboard a Navy vessel.

I am a Navy Health Scholarship student at the University of Maryland School of Medicine and I have recently completed shipboard orientation for my 1980 Active Duty for Training (ACDUTRA). Although three other medical students participated in the program with me, I was

the only female. Before requesting shipboard orientation, I asked the Health Sciences Education and Training Command (HSETC) what this program would offer a woman. I didn't know if there were even any ships which could carry women. HSETC informed me that women are allowed only on certain ships but that the Navy could accommodate me in the program. Anticipating the desire to spend the summer between my sophomore and junior year away from the medical setting, I requested ACDUTRA at sea. I would like to share my perspectives on the program and urge other medical students, both male and female, to consider this option when choosing their ACDUTRA. It is a worthwhile experience, regardless of your gender.

The program is described as 40 days on a ship with at least 10 days at sea. My 40 days began on 25 June 1980. With the National Boards (part I) two weeks behind me, I drove from Baltimore to Norfolk. I was anxious about whether I would remember who and how to salute. I

was excited about spending 10 days at sea and worried about how many of those days I would be seasick. But most of all, I was curious and somewhat apprehensive about how the men aboard ship, both officers and enlisted, would react to a female medical officer.

I reported to the Commander in Chief, Atlantic Fleet (CINCLANTFLT) medical office (nervously saluting anyone I passed on the way), met the other medical students and found that we had been assigned to USS *Emory S. Land* (AS-39), a submarine tender. We were informed that *Land*, unfortunately, would be in port the full 40 days but that effort was being made to get us on board a ship underway. I suspect the difficulty of this task was at least partly due to the few number of ships which are authorized to carry women. Nevertheless, my colleagues and I made it known to anyone in khakis who would listen that we would not be content to spend 40 days on a ship in port.

We reported to *Land* and were pleasantly received by the medical

department. Although there were two other female officers on board, I was still looked upon as an oddity. At times being in such a minority was inconvenient: it was frustrating to try constantly to prove that I really belong there. However, for the most part, being one of three women on a ship with a crew of 1,100 men was an advantage. I received plenty of attention, none of which was distasteful or derogatory. I made friends easily on the ship because I was readily recognized. It was nice to be remembered and not have to show my ID every time I came on board. And of course, when it comes to social life, it is quite an advantage to be in the minority. The officers and enlisted men were courteous to me but generally did not treat me much differently than they treated my colleagues. I was accepted and respected as another officer.

Our time on *Land* was spent touring the different divisions (a large task on a tender) and learning about the ship's organization and day to day life. Our spare time was spent either at Virginia Beach or trying to arrange a trip to anywhere on any type of ship; we weren't picky. The master chief corpsman on *Land*,

probably tired of hearing us complain, arranged a single-day cruise on USS *Barney* (DDG-6). At last, we went to sea, if only for six hours. The experience made me even more determined to arrange the 10 days at sea which I felt I deserved. I learned that *Barney* was going to the Caribbean for two weeks but could not arrange to take a female. However, there were other ships also making the cruise. USS *Trenton* (LPD-14) was mentioned as one of the ships going to the Caribbean which could possibly carry females. Again the master chief corpsman did the arranging. *Trenton* did not normally carry military women but was able to accommodate me provided I find another female to go along. The Navy does not allow just one female on a ship; there must be at least two. After pulling a few strings, arrangements were made and we reported aboard USS *Trenton* on 21 July 1980 for a two-week cruise to the Caribbean. It was on board *Trenton* that I learned what the Navy is really about. There is no other way to learn about shipboard life than by actually living and working on a ship at sea.

On *Trenton*, even more than on *Land*, my gender caused me to be

noticed. Whether I was sitting on the flight deck or standing on the bridge, I received attention. I took advantage of it and talked to crewmembers at every level and in every department. This gave me an understanding of what it really means to be a boatswain's mate, an engineer, a signalman, etc., an understanding that will be invaluable when I am serving the Navy as a medical officer. I asked the men on *Trenton* how they felt about having women, particularly women medical officers on board ship. Some expressed concern about having to talk to a female about a personal medical problem. More often, however, the men thought it would be nice and perhaps even beneficial to have a woman with whom to talk. A few anticipated that sick call might even become more popular than it already is. During the two days which I worked in sick bay, I experienced complete acceptance by the doctor, the corpsman, and the patients.

Shipboard orientation was full of valuable and memorable experiences. I had many enjoyable times (e.g. two days liberty in St. Croix, a barbecue on the ship in the middle of the Atlantic), along with some relatively unpleasant experiences (e.g. standing bridge watches while on a three-section duty bill). By experiencing both positive and negative aspects of shipboard life, as well as by having one to one contact with members of the crew, I am far better prepared to serve the Navy. I highly recommend this program to other medical students. It gives an insight into the Navy which cannot be gained any other way along with providing some incredible experiences. For those of you who do participate in the program, insist upon arranging some time at sea. The effort needed to make the arrangements is well worth it.

—ENS Randi D. Lebar, MC, USNR □



Dr. Lebar with USS *Trenton* in background.



Soviet Naval Medicine

CAPT R. Paul Caudill, Jr., MC, USN

Appendicitis and Ileus: Surgical Care at Sea

Part six in a continuing series.

Soviet naval medical literature has contained numerous articles concerning appendicitis. Soviet surgeons had taken note of the shortage of physicians in the U.S. Navy and commented on how that shortage resulted in a conservative therapeutic approach to appendicitis aboard U.S. submarines. (1) The conservative approach was not favored by Soviet naval surgeons. Indications for conservative therapy were felt to be almost as specific as those for surgery.

Appendicitis

Soviet authors felt the etiology of acute appendicitis to be related to a number of factors:

- restricted mobility of submariners
- eating conditions (unexplained)
- frequent necessity for restraining of physiological functions (unexplained)
- pitching and vibrating of sub-

marines contributing to the development of the pathological process through activation of local foci of infection by mechanical irritation of shifting of the intestines (2)

Diagnosis of acute appendicitis on Soviet ships and submarines was based on anamnestic data, physical examination, general condition of the patient, and laboratory data which in some cases was restricted to one peripheral leukocyte count. Considerable emphasis, therefore, was placed on the evaluation of signs and symptoms by the ship's physician. (3)

There was considerable concern for the impact of appendicitis on the "self-contained cruise." Appendicitis was reported to be the most frequent surgical ailment in naval personnel, according to a 1966 article.

Factors influencing the decisions of the ship's physician included:

- clinical experience and surgical training of the surgeon and aides
- presence of conditions compatible with accomplishing surgery
- sea conditions
- possibility of evacuation

- availability of getting outside help
- the basic mission of the ship or submarine
- the tactical situation (4)

The Soviet naval physician was forced to consider the fact that in some cases only untrained help was available. (5)

In a 1966 article, (6) Captain of the Medical Services, V.A. Katonin noted that on smaller ships and submarines the arguments against surgery centered around the lack of proper conditions and the lack of availability of antibiotics. He noted that the "absolute majority" of physicians did not use conservative treatment because of "being justly afraid" of dealing with an atypical case of appendicitis "dangerous by its sequelae." He felt the chief method of treatment of patients with acute appendicitis at sea should be surgery, using strict indications and that the importance of training of surgeons and surgical teams should be emphasized using shore facilities, strategic cruisers, and floating bases.

The indications for conservative

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treatment listed by Captain Katonin included heavy storms, unfavorable tactical situations, and patient refusal, all accompanying a "non-progressive course of appendicular infiltration." He felt that patients who recovered without surgery should be carefully evaluated on return to base.

Captain Katonin was a strong advocate of education of the crew in health matters. Delayed visits to sick bay in the face of significant symptoms suggested the need for health education.

Captain Katonin felt that atypical appendicitis was noted for several reasons:

- masking effect of seasickness
- "widely known disturbance of intestinal function as a result of specific nutrition and life" aboard submarines
- effect upon personnel of neuropsychiatric stresses

In 1966, Malyarenko and Tselishchev(7) discussed methods of decreasing acute appendicitis of submariners on cruise. They stated that there were no advocates of preventive appendectomy either in the Soviet Union or abroad. They felt strongly that if submarine personnel showed up with only "weakly defined clinical signs" of acute appendicitis while ashore, they should have surgery to prevent later recurrence at sea.

From June 1962 to August 1963, the authors saw six patients with appendicitis. The patients had all displayed earlier symptoms. Four had not sought help. Two had sought assistance, but symptoms were indistinct and observation was used. They recovered to have gangrenous appendicitis later. Therefore, the authors recommended the following:

- educate patients to seek help early
- evaluate patients with abdominal complaints carefully and thoroughly

- operate on those with suggestive symptoms

This policy led to the authors having seen no further cases of appendicitis at sea from August 1963 through March 1966. In their opinion these guidelines were instrumental in helping to reduce episodes of acute appendicitis at sea.(8)

In 1966, Malyarenko and Tselishchev stated that if after six hours of conservative therapy the patient had not improved, surgery should be accomplished. If the patient was improving, however, surgery should be delayed. An operation was advised only to save life at sea.

In an article published in 1967,(9) Captain of Medical Service, V.V. Kholod wrote that in conservative treatment of appendicitis, patients experienced relapse among sea duty personnel 1.5 to 1.8 times as often as among shore-based personnel. Therefore, he felt that active surgical intervention was indicated for all proven cases of acute appendicitis. Conservative therapy was indicated only where early evacuation was possible or symptoms of "appendicular infiltrate" was found.

Writing in 1969, Captain Katonin (10) noted that in a well equipped and staffed ship, the situation should be viewed like that ashore; all acute appendicitis patients "must undergo immediate surgery." On other ships and submarines, there was a more differentiated approach if the diagnosis was unclear or symptoms mild.

The majority of surgeons, said Katonin, considered it expedient to keep the patient under "intensive observation" which included the following:

- patient in bed
- patient kept "hungry"
- ice to the right iliac region
- sometimes: antibiotics

atropine

IV novocaine

perirenal novocaine blocks

Katonin also wrote of "dynamic observation." He did not define this term but said it was a poor procedure. The majority of ships' surgeons recommended that with a pronounced picture, the patient either be evacuated immediately or taken to surgery. In a mild picture, intensive observation was recommended without the use of any medication that might change the manifestations of the disease.

Katonin quoted Soviet authorities as saying that surgery was indicated whenever four to six hours of conservative treatment was not followed by definite improvement. One favorable aspect of the short period of intensive observation in selected cases was the reduction of error and the decrease in surgery. (11)

Seventy-four percent of vermiform processes removed during long cruises were said by Katonin to have been subject to "destructive changes." He did not feel the pathological changes or complications were due to periods of controlled intensive observation. He stated that complications were noted only in latecomers to sick bay and in those who received long periods of conservative therapy.

A statement of Lieutenant Colonel of the Medical Services, L.G. Galaktionov presents a dilemma faced by educators and supervisors. "Ultimately, the extraordinary activity of some submarine physicians cannot be justified who subject patients to operation without sufficient basis for it." (12)

Only when surgery aboard was impossible and evacuation out of the question, was conservative therapy considered acceptable or justifiable. Katonin felt that conservative therapy was allowable when

the patient refused categorically, there was no trained surgeon, and bad weather made the surgery technically impossible(13)

If conservative therapy was forced, the "complex type" was directed:

- bed rest
- no food
- occasional gastric suction
- cold compresses to the abdomen
- antibiotics and sulfonamides
- perirenal novocaine blocks
- atropine
- parenteral salt solutions and proteins
- analgesics

Records available in 1969 indicated that no fatalities had occurred as a result of conservative therapy, but that there had been severe complications, including diffuse peritonitis, abdominal abscesses, and lengthy hospital stays. The Soviet author recommended further improvement in the clinical training of naval surgeons facing long cruises. (14)

One article discussed a review of 3,581 cases transferred to shore hospitals with referring diagnosis of acute appendicitis.

- Receiving room physical repudiated diagnosis in 597 cases (10.7 percent)
- Surgical consultation repudiated diagnosis in 417 cases (7.5 percent)
- Chronic appendicitis diagnosed (7.9 percent)
- Gastritis, stomach, and duodenal disorders (3.1 percent)
- Worms (1.4 percent)
- Kidney and ureteral disorders (1.0 percent)
- Mesadenitis, dysentery, enterocolitis, cholecystitis, intestinal obstruction and others (2.0 percent)
- Not established (2.8 percent)
- Errors of another sort (well on arrival) (3.1 percent)

Three hundred sixty-eight individuals were discharged when their symptoms abated, but 37 returned in two to three days and had surgery. Of those who went to surgery:

- age range 5-74 years (83.4 percent 19-40 years)
- 57 percent arrived at hospital within 12 hours from onset
- 25.5 percent arrived at hospital 12-24 hours from onset
- 11.0 percent arrived 24-48 hours from onset
- 6.5 percent arrived greater than 48 hours after onset
- 78 percent had surgery in the first three hours after admission
- 11 percent 3-6 hours
- 10.7 percent later than six hours (15)

A 1971 article(16) reviewed the treatment of acute appendicitis aboard ship. Acute appendicitis was recognized as one of the most common surgical disorders on submarine cruises. Appendicitis among crewmembers at sea occurred 1.5 times as often as between cruises.

The authors reviewed 170 cases which occurred during long submarine cruises from 1958 through 1970.

- 78.6 percent sought help in less than six hours
- 21.4 percent waited beyond six hours to seek help

Surgical diagnosis was based on history, physical findings, and general conditions. The author commented on difficulties which appeared at times related to constipation at sea, seasickness, and gastroenteritis. In such cases, a blood count was not always done, and sometimes when it was done, it was limited to a total peripheral leukocyte count. In some difficult cases, physicians had forgotten or ignored

relatively simple tests or exams such as rectal examination. In 66 percent of the 170 cases, surgery was accomplished within six hours of reporting; 22.2 percent had surgery in 12 to 24 hours, and 11.2 percent later. Causes of delayed surgery included:

- indistinctness or lack of clinical symptoms
- diagnostic difficulties
- bad weather (less common)

When surgery was delayed, the patients had been hospitalized for observation and put to bed fasting with ice to the abdomen. Drugs were again not recommended in ambiguous cases because they decreased symptoms and were associated with severe aftereffects.

The most commonly used anesthetic was local, with only one general anesthetic given in the entire group of 170 cases.

The incision on all was a diagonal right iliac region incision. The main reason for technical difficulties was that some surgeons did not make incisions of adequate length (see chart).

The results suggested to the author that catarrhal appendicitis was most common on surface vessels, while the destructive forms of acute appendicitis were more frequent on submarines, possibly because of the use of conservative surgical tactics.

The author recommended that all surgical specimens be preserved in 10 percent formaldehyde and sent to laboratories on return from cruise.

Of the 170 cases, 164 were closed, 22 with abdominal drains and 14 with subcutaneous drains. Six were closed with tamponade and drainage of the abdominal cavity. All received penicillin and streptomycin IM postoperatively; 28 received antibiotics through the drain into

Final diagnosis	Submarine Patients	Surface Patients
Catarrhal appendicitis	20	40
Phlegmonous appendicitis	68	25
Gangrenous appendicitis	10	5
Appendicular appendicitis	2	0
	<u>100</u>	<u>70</u>

the abdominal cavity. The author felt that vitamins postoperatively were important, particularly ascorbic acid.

Of the 170, 164 recovered aboard and six were transferred ashore. The average length of treatment was 11.5 days.

Complications occurred in 12 cases:

- 9 after gangrenous appendicitis
- 1 after catarrhal
- 1 after phlegmonous
- 1 after appendiceal infiltrate
- 11 of 12 had suppuration of wound
- 1 developed intestinal fistula closed after second operation in hospital ashore

Healing by primary intention occurred in 158, secondary in 12; 165 had no complaints subsequently.

The article stated that before each cruise, there should be an effort to discover those with functional gastrointestinal disorders or symptoms of chronic appendicitis. One Soviet author also stated, "We believe regular physical exercise is a very effective way of preventing it." (17)

Ileus

In a 1978 article discussing the treatment of ileus at sea, there were a number of interesting concepts

revealing something of the Soviet approach to surgery at sea. (8)

The authors noted that before deployment, there should be careful evaluation of embarking personnel. Special attention should be directed to those with complaints of constipation, intermittent abdominal pain, distention, and those with histories or prior abdominal surgery. Any individual with a questionable history should be sent to naval hospitals for further evaluation.

On long cruises, the "prolonged solitary cruise," acute ileus was said to comprise 0.9 to 1.1 percent of all diseases of the intestine and peritoneum. Ileus was found most commonly as:

- commisural ileus following appendectomy and other surgery of the abdominal cavity, particularly small bowel surgery
- volvulus of a prolapsed sigmoid colon with symptoms of chronic ileus
- strangulated inguinal hernia with indications of ileus of the small intestine

It was recommended that if ileus was suspected, the patient be admitted and closely observed. One technique was the administration of the A.V. Vishnevskiy bilateral perirenal novocaine blockade, with one milliliter of a 0.1 percent atropine solution injected subcutaneously

and a hypertonic saline solution given intravenously, followed by a siphon enema. This method was said to be effective in differentiating dynamic and mechanical ileus. If a strangulated hernia was found, immediate surgery was recommended.

If there was ileus requiring surgery, it was recommended that two or three surgical teams be organized by recruiting physicians from other ships or a surgeon from the reserve group for the procedure. Anesthesia on frontline surface ships was performed under an ether-oxygen anesthesia mask, or with local anesthesia with novocaine and premedications of atropine, diphenylhydramine hydrochloride, and phenobarbital.

An article by M.V. Portnoy expressed a philosophy concerning surgical techniques.

When operative treatment of patients with acute intestinal obstruction is necessary on board ships, a minimum amount of intervention is used aimed at elimination of the obstruction—removal of adhesions, correction of torsion or resection of a dead loop of sigmoid intestine with bringing of the ends of it to the outside in the form of a double-stemmed anus. The repair operations are performed subsequently in the hospital. Patients with acute cholecystitis and pancreatitis are successfully treated conservatively. (19)

Portnoy gave no statistics on the incidence of cholecystitis or pancreatitis aboard Soviet vessels.

In his opinion, physicians going to sea should be prepared to perform surgery and should receive training to that end. However, he emphasized the principle that surgical intervention should be limited to the degree required for patient survival and transfer in the given situa-



Captain Shapovalov removed his own appendix under self-administered local anesthetic.

tion. He also stated that in most cases, however, the surgical postoperative period was completed aboard ship and that evacuation ashore was rarely required.

Shipboard physicians normally planned evacuation to a fleet medical facility for further treatment and consultation when necessary. If postoperative complications occurred, it was recommended that patients be transferred to a medical facility or a "first-line ship" as soon as possible. (20)

A Unique Surgical Experience

In an interesting pair of articles, (21,22) Captain A.A. Shapovalov, Medical Services, described problems in the surgical and recuperative course of a patient who had experienced an appendectomy aboard a submarine at sea. Because of operational commitments, it was undesirable for the submarine to surface to transfer the patient. Therefore, surgery was performed. There was a single complication. The patient with appendicitis was the ship's surgeon.

Setting up the surgery in the wardroom, and supported by the hands of shipmates, Captain Shapovalov removed his own appendix under self-administered local anesthetic. He fainted while mobilizing the cecum, but was revived when his assistants bathed his face in ice water. The gross findings were described as phlegmonous appendicitis. Sutures were removed on the seventh postoperative day and the wound healed by primary intention.

Captain Shapovalov wrote of the relatively hostile environment within the submarine. The postoperative microclimate was hot, humid, with problems of air movement and constantly changing barometric pressure within the submarine. While the submarine was underwater, air was constantly leaking into the com-

partments because the high and medium pressure air systems were not hermetically sealed. Therefore, there was a fluctuating rise in barometric pressure to a maximum value followed by the triggering of relief devices and a subsequent drop in acceptable barometric pressure levels in a very short period of time. The slow rise in pressure was not the problem. To a postoperative patient with ileus, however, the rapid drops in pressure caused gas shifts and overdistention of the bowel. Pain was the unpleasant result. Because of his personal and intimate familiarity with the consequences of the pressure shifts, Shapovalov recommended that ships' surgeons try to keep submarine internal barometric pressures more level during postoperative periods, controlling the devices which equalize pressure to prevent sharp and abrupt changes. Additionally, the use of decompressing devices such as colon tubes was recommended.

Shapovalov's seniors recognized his personal courage and the risk he took. He was commended in another article for endeavoring to allow the submarine to complete its mission without interruption and disclose its position. This dedication to duty was considered worthy of high praise by Soviet military medical leaders.

* * *

Soviet awareness of physician manning of submarines of the U.S. Navy led to their analysis of our methods of treatment of certain problems at sea. Repeatedly, the Soviet authors spoke of the need to complete missions at sea without interruption; a forced medical evacuation was to be avoided if at all possible. Thus, it appeared that individuals selected for duty aboard submarines were carefully evalu-

ated for possible abdominal disorders. Similarly, Soviet naval physicians were given special training in diagnosis and treatment of abdominal complaints. Both of the efforts were intended to minimize the incidence of medical disruption of a mission.

The expression of concern about "the extraordinary activity of some submarine physicians" and "operation without sufficient basis" is a concern which has been mirrored in similar manner in our own Navy. It is policy aboard ships of our fleet that surgery be weighed most carefully, balancing the need for the surgery with the best interest of the patient, the level of training of medical personnel, and operational exigencies.

Soviet literature evidenced effort on the part of medical professionals to study the history and results of illness, surgery, and referrals from ships of the line. Such studies would allow beneficial analysis of experience and planning of methods of improved training and practice.

The concern for the proper handling of surgical specimens is shared by our own surgeons afloat. The establishment of proper procedures and audit mechanisms for the handling of operative specimens is essential to state-of-the-art surgical care.

The process of predeployment evaluation of the health history of deploying personnel is given great importance by Soviet authors. Predeployment personnel review in the submarine community provided a method of seeking individuals with history of abdominal complaints that might suggest the potential for future problems. To detect such individuals and deal with them before deployment would be to improve the chance of completing a deployment without medical emergencies requiring evacuation or surgery.

The articles reveal that it was not uncommon for patients to be transferred from smaller combatants to medical facilities or first-line ships for further care as needed.

Shapovalov's experience in self-surgery was most extraordinary. Few shipboard medical officers would attempt the sort of procedure he accomplished.

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NOSTRA Brings the Armed Forces into Focus

HCMC Curtis A. Crocker, USN

Imagine a seaman on watch aboard a naval vessel who cannot distinguish an approaching object, or a pilot landing on the flight deck of a carrier who has difficulty focusing. The consequences could be grave if inaccurate information or calculations are the outcome of impaired vision. Healthy eyes are an important dimension of Navy medicine and it takes a lot to keep them that way.

There are Navy ophthalmologists, optometrists, ocular technicians, and opticians stationed all over the world examining eyes and fitting eyewear for active duty, retired, and other eligible personnel. But this is only the beginning. Supporting these trained specialists are 13 scattered single-vision Navy units around the globe and a small one-of-a-kind command nestled in the 10,000 wooded acres aboard the Naval Weapons Station in Yorktown, VA.

Adequate vision has always been recognized as an essential requirement for military service. During World War II, an ophthalmic program established by the Navy Appropriations Act of 1942 authorized funds for the issuance of prescription eyewear to Navy and Marine Corps personnel abroad. Base optical units with the capability of filling a limited range of prescriptions were set up and truck-mounted optical units stocked with pre-finished eyewear serviced forward

areas. The Navy inaugurated a program to provide prescription eyewear for all its personnel in 1945. Soon there were 65 spectacle dispensing units within the United States ordering and fitting eyewear

made under contracts with civilian laboratories. A five-week program at the Naval Medical Supply Depot, Brooklyn, NY, trained spectacle dispensers who staffed these units.

The same year, also in Brooklyn,

Photos by Walter Becknell



HM2 James Waller completes the edging process. This is necessary before lenses can be mated to their frames.

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HM3 Theodore Angco fines and cleans a lens surface.

the Navy opened an optical school with courses for opticians and dispensers, and four years later, ophthalmic laboratories with surfacing capabilities were established in Brooklyn, and in Oakland, CA. The commissioning of four continental ophthalmic service units to fabricate prescriptions from finished uncut single-vision lenses followed and other overseas units were modernized.

In 1973, the Navy Ophthalmic Support and Training Activity (NOSTRA) was dedicated at Yorktown, VA. The next year, construction added administrative offices, an

environmentally controlled warehouse, and an Optician Technician School.

In October 1978, a Department of Defense realignment of operational responsibilities created the Tri-Services Ophthalmic Program. As a key element in the regionalized approach to worldwide delivery of ophthalmic support services, NOSTRA provides monthly an average of 30,000 pairs of prescription eyewear. The command's responsibility includes units and personnel of the armed services east of the Mississippi River all the way to the 90th meridian. The Ophthalmic Unit at the

Army Fitzsimmons Hospital in Denver, CO, supplies the other half of the world. NOSTRA's primary workload is in the single-vision aspect and the facility provides a great deal of its support to the Navy in the form of flight deck eyewear for special headgear.

CDR William Smith, MSC, the unit's executive officer, acknowledged the efforts of his dedicated staff but also emphasized that the mission depends on support from specialists worldwide. These specialists include the ophthalmologists who primarily treat diseases of the eye and perform required surgery,

ocular technicians who assist in surgery and manage clinics, and optometrists who test eyes and prescribe corrective lens. Opticians make the eyewear.

All requests arrive at NOSTRA in the office of Walter Buriak. A retired senior chief hospital corpsman, he has been with NOSTRA 18 years. "I like to refer to this as the mouth of the organization," he told *U.S. Navy Medicine*. All requests, (DD Form 771) are received, dated, reviewed for accuracy and categorized by the type of work required. This office initially handles reimbursables—organizations that pay for their work, i.e. U.S. Coast Guard and Air National Guard. NOSTRA offers priority service to recruits in Orlando and Great Lakes over the phone and return time to these commands is two days. All other requests are in and out within a week. NOSTRA returns improperly prepared requests to commands only in those cases where a functional pair of glasses cannot be made. "We pay particular attention to requests from ships in order to keep the sailors at sea on their jobs," Buriak added.

Ten percent of the monthly requests NOSTRA receives are returned to the naval regional medical centers. Because these commands no longer have trained opticians to assist optometrists, mistakes are often made that cause a delay in delivery to the patient. "The most common mistake is not following the guidelines in BUMEDINST 6810.4G," said HMC Rick Justus, the senior enlisted assistant. He went on, "Opticians need to be scattered throughout all medical facilities. Commands need that expertise." The optician community now stands at 164 and of that number 133 are at NOSTRA.

After processing, the requests are routed to the stock room where HM1 William Toucher sorts them

according to refractions and available stock. He issues single-vision lenses or multi-vision (bifocals), selecting the frames that are indicated. There are three frames available, standard black, the wire aviation frame, and the mask-compatible frame. He places the lenses, frames, and optometrist's refraction request in a plastic work tray and sends it to the layout section.

The opticians in layout are the plant architects who set the entire process in motion. First covering the prefinished side of the lens with a protective cohesive spray, they attach to this prefinished side a low melting point metal alloy, LAMPA, which is called a block. This provides a means of fastening the lens to the various machines as it moves through the finishing process. The opticians set the lens axis by marking the exact spot where the optometrist desires the power of the refraction to appear. The lens is then ground with a coarse abrasive within .5 mm of the desired finish with a coolant-flushed diamond wheel. The remaining .5 mm of lens surface is removed during fining, a process that requires a fine, wet sandpaper. Once the curves have been cut, the prescription is there to stay and the lenses move on for edging, which yields the bevel to fit the frame, and tinting, where shades of color are added. The frames are then immersed in heated sodium chloride crystals. This softens the plastic so the lenses can be mounted. Seventy-five percent of the lenses are plastic and 25 percent glass. All personnel in a flight status or who operate aircraft get glass which won't torque like plastic, making it safer in aircraft. Flight deck personnel are issued plastic lenses. After mounting, all spectacles are again checked for accuracy and mailed to their destinations.

Everywhere one walks through

the production area there is motion and energy, none of which is wasted. Blue-smocked opticians stand before machines; others sit at tables or benches working on stacks of trays filled with spectacles. A cacophony of whirring machinery and other noise resonates throughout.

Because of the rigid day-to-day routine, one would suspect an erosion of quality, zeal, and enthusiasm. This is not the case. The final product and the patient remain the utmost concern. A majority of technicians seem content, but for others, something is missing. "When I was a general duty corpsman," said HM1 James Tumlin, "I never saw the end result. After treating a patient, I never saw her or him again. When I put glasses on an individual, there is an obvious expression of gratitude." HM2 David Goodall, an optician for almost six years, commented, "The job doesn't change much. Here you're moving lenses from place to place. I enjoy working in clinics too. If things don't open up there for opticians, I'm getting out." These two experts lack nothing in dedication yet they yearn once more for the patient contact the clinics offer.

LCDR Robert Norvell, MSC, NOSTRA's administrative officer, told of progress and the activity's growth. This year the budget was almost \$3 million and, since tri-service began, NOSTRA's reimbursable billings increased from 8 to 92. He indicated that the command had set many goals and centralized functions. "It's so beautiful," he pointed out, "because we go right out and accomplish the things we identify. Our morale is high and we can see personal growth in the staff. For a staff this large we have very few discipline problems."

NOSTRA is one of the top 10 ophthalmic units in the country and

production statistics are high, so high that the facility finds it necessary to be self-sufficient. Since no optical company can afford to stock such a large volume of lenses, NOSTRA keeps at least a four-month supply on hand. The unit is not its own purchasing agent and must go through the Naval Weapons Station for its supplies. There are times when immediate purchases must be made and local commercial firms are not always prepared for large volume requests.

Keeping the machines on the line is the job of NOSTRA's trained equipment repairmen. Mr. Robert

Gardner, HMC Charles Ballard, and HM1 Gary Blaketer are all opticians who have kept up to date by attending courses offered by several optical equipment manufacturers. They make minor modifications that enhance productivity, check the equipment daily, and maintain it on a weekly basis. In line with the emphasis on safety, they, as well as all opticians, must wear safety shoes and protective ear and eye-wear when necessary. These precautions keep job related injuries to a minimum.

The Optician School at NOSTRA is the breeding ground for all tech-

nicians. Students start right out working on real patient glasses after an initial practice time on obsolete stock. They enjoy making functional eyewear and are taught from the beginning to be accurate and avoid rejects. Most students have the capacity for hard work and possess the mechanical aptitude. HMC Christopher Picaut, the senior instructor, stated that "The most common flaw in students is a misunderstanding of what an optician is all about. Those that don't make it cannot accept the factory setup here." All instructors have spent time in every aspect of the produc-



Quality assurance is a key element at NOSTRA. Here, three opticians check refraction of lenses for accuracy.

tion line and are identified for instructor billets by noteworthy performance.

Instructors HMC Michael Salyer and HM1 George Hart are proven opticians. Chief Salyer finds it rewarding when production line opticians seek advice from him in areas they may have forgotten. "Instructing keeps me on top of all aspects of opticianry," he said. HM1 Hart, whose tours at NOSTRA total nine years during his Navy career, is the most recently selected instructor. He pointed out that "Every phase of the shop is definitely a help in the classroom. I'm able to give the students real ideas and situations

they will encounter." HM2 Credin Farris, who once assisted the ophthalmologist in the operating room as an ocular technician, now would like to broaden his knowledge toward the optics side by making eyewear, and plans to obtain an associate degree in opticianry while at the school.

The Optician School is accredited with the Virginia Community College System and affiliated with Thomas Nelson Community College, which offers 69 credit hours toward the 105 required for an associate degree in opticianry. The college offers classes during the lunch break so students and staff

can obtain a full degree in a year's time right at the command. The fact that there are no ship billets for opticians is another attractive aspect of the school. Most graduates are retained at NOSTRA for their first tour as opticians. The command career counselor, HM1 John Holder, commented that only 13 other duty stations exist for opticians yet the morale in the community remains very high. No waivers are accepted for the mechanical score (50) required, and E-6 candidates are discouraged from applying because the community has become top heavy.

Productivity at NOSTRA never seems to slacken. The shift changes at 1530 but as HMC Pat Gornick, PM supervisor, indicated, "We just carry the load right along with fewer people."

A silent minority also helps man the production area. Following a suggestion by the Handicapped Coordinator at NSC Norfolk, the command hired five deaf employees to fill several unskilled positions. "We brought them in and they have performed marvelously," said CDR Roy L. Gooch, MSC, NOSTRA's commanding officer. The command's military and civilian staff recently completed a course in sign language to make communication with their new colleagues easier.

The significance of the volume of work NOSTRA turns out is always in evidence. The executives realize it, the patients in the fleet acknowledge it, and the staff is conscious of their important role. Perhaps the most realistic assessment of this immense effort was voiced by Mrs. Joan Emerson, one of NOSTRA's civilian budget analysts. "I've been on this base for 18 years, 17 of which I spent in other commands. As I passed this building each day, I never realized so much was being done here. After a year at NOSTRA I'm still impressed." □



Ms. Orpha Garns labels eyewear for mailing.

Predictors of Mental Disorders Among a Navy Mental Health Clinic Population

LCDR Raymond N. Sampson, MSC, USN

Dennis McLaughlin, Ph.D.

Richard J. Tabor

Throughout the Navy, psychologists and psychiatrists are required to psychiatrically diagnose, treat, and recommend suitable disposition for their patients. Certain demographic data the patient relates may be of help in reaching the appropriate psychiatric diagnosis.

Booth, Bucky, and Bucky (1978) utilized demographic data in predicting mental disorders among Navy hospital corpsmen. Those who had mental disorders tended to have less formal education than their fellow corpsmen. They tended to enlist in order to escape their home environments. The mentally disordered corpsmen also had a significantly more extensive past criminal record and school behavior problems than their fellow corpsmen.

The present study sought to determine the relationship between

education and mental disorder among those seen in a Navy mental health clinic without regard to the patient's rate. Is the psychiatrically diagnosed Navy mental health clinic patient likely to be less educated than the mental health clinic patient who receives no psychiatric diagnosis?

In order to extend the Booth, *et al.*, (1978) study further, the present investigators sought to determine the relationship between number of judicial and nonjudicial punishments and psychiatric diagnosis. More specifically, are Navy mental health clinic patients with a military history of judicial and nonjudicial punishments more likely to receive a mental disorder diagnosis?

Age of patient was also examined to determine its relationship to mental disorder. If those with less education tended to receive a mental disorder diagnosis more frequently, perhaps such a finding may be confounded by the age of the patient.

The last independent variable examined was length of completed service. Specifically, are those with more completed service more likely to receive a mental disorder diagnosis?

Method

The demographic records of 340 former Pearl Harbor Mental Health Clinic patients were randomly selected. The diagnosis of each patient was obtained and coded under one of the following categories:

- neurotic or psychophysiological
- personality disorder
- situational adjustment reaction
- psychotic, organic, or special symptoms
- no psychiatric diagnosis (i.e. no mental disorder)

The disposition for each case was also obtained. Thirty-seven of the patients were female (10.9 percent); 303 were male (89.1 percent).

Means and standard deviations were obtained on all coded independent variables. Analysis of variance served as the test for determining the relationship of age, length of completed service, number of judicial and nonjudicial punishments, and education to diagnosis of mental disorder.

The Kruskal-Wallis One-Way Analysis of Variance by Ranks was also applied to the data for two reasons. First of all, the Kruskal-Wallis is a nonparametric test which corrects for ties, so our conclusions are

When he participated in this study, Dr. Sampson was a clinical psychologist at the Mental Health Clinic, NRMCC Pearl Harbor, HI. He is now a student flight surgeon at the Naval Aerospace Medical Institute, Pensacola, FL 32508. Dr. McLaughlin is a psychologist working for the State of Hawaii. Mr. Tabor, a corpsman at the time, is now a student at the University of Minnesota.

TABLE 1. Years of Education Broken Down by Diagnosis

Diagnosis	Mean	Standard Deviation	N
Neurotic or Psychophysiological	12.74	1.25	23
Personality Disorder	11.88	1.40	121
Situational Adjustment Reaction	11.82	2.67	56
Psychotic, Organic, or Special Symptoms	12.18	1.35	60
No Psychiatric Diagnosis	11.99	.96	80
			340

TABLE 2. Number of Judicial and Nonjudicial Punishments Broken Down by Diagnosis

Diagnosis	Mean	Standard Deviation	N	F
Neurotic or Psychophysiological	.26	.61	23	
Personality Disorder	1.21	2.01	121	
Situational Adjustment Reaction	.64	1.17	56	
Psychotic, Organic, or Special Symptoms	.72	1.49	60	
No Psychiatric Diagnosis	.64	1.02	80	
				3.21*

* $p < .01$ (df = 4,332)

not as dependent upon questionable assumptions of distributions. Secondly, the same therapist did not see all patients included in this study. The Pearl Harbor Mental Health Clinic had two psychiatrists and three psychologists when this study was conducted. Each therapist interviewed and diagnosed some patients. The Kruskal-Wallis provided a conservative way of determining whether the differences among the diagnostic categories

signified genuine population differences. The fact that differences were found among diagnostic groups implies there was accurate diagnosis rather than merely chance variations due to different competency levels of the therapists.

Results

The average age of the patients was 23.39 years. Standard deviation was 6.26 years. Two hundred and three (59.7 percent) of the patients

were single; 113 (33.2 percent) were married; 24 (7.1 percent) were divorced.

The average length of completed service was 50.78 months. The standard deviation was 57.38 months. The range was 4 to 283 months. There was obviously much variance in length of completed service.

Two hundred and seven of the patients had not received any judicial or nonjudicial punishments. The maximum number of combined judicial and nonjudicial punishments seen in any one patient was 15. The average number of punishments was .83. Standard deviation was 1.55.

Two hundred and four patients reported no history of psychopathology among their parents. Fifty-six patients reported their mother had a history of psychiatric illness. Forty-nine reported their father had psychiatric illness. Thirty-one reported that both their mother and father had a history of psychiatric illness.

Thirty-nine reported both parents deceased. Twelve reported a deceased mother. Eight reported a deceased father.

Two hundred and sixteen patients listed their parent or parents as currently married. Eighty-six reported their parents divorced. Twenty-nine listed their parents separated.

The average education level of the patients was 12.00 years. Standard deviation was 1.59 years.

Twenty-three (6.8 percent) patients were diagnosed either as neurotic or psychophysiological. One hundred and twenty-one (35.6 percent) patients were diagnosed as having a personality disorder. Fifty-six (16.5 percent) were situational adjustment reactions. Sixty (17.6 percent) were diagnosed either psychotic, organic, or under a "special symptoms" category.

Eighty patients (23.5 percent) were given no psychiatric diagnosis (i.e., no mental disorder).

Of the 340 patients only 27 (7.9 percent) had been recommended for separation or discharge by his psychotherapist. The rest of the patients were treated at the Mental Health Clinic, hospitalized or received some disposition other than a recommendation for separation or discharge.

When not corrected for ties, education level was not significantly different among mental disorders [$F(4,332) = 1.83, p < .12$]. However, when patient education level was corrected for ties, a nonparametric test showed the association between education by diagnosis was significant ($X^2 = 10.97, p < .02$). Table 1 presents the mean education levels and standard deviations for the different psychiatric diagnostic groups.

The number of times the patient had received military judicial and nonjudicial punishment was also significantly related to psychiatric diagnosis [$F(4,332) = 3.21, p < .01$]. The greater the number of punishments, the more likely the patient was to receive a mental disorder diagnosis. Table 2 presents the mean number of judicial and nonjudicial punishments as well as the standard deviations for the different diagnostic groups. Patients diagnosed as having personality disorders had the largest average number of judicial and nonjudicial punishments. Those diagnosed as neurotic or psychophysiological had the smallest average number of judicial and nonjudicial punishments.

When number of punishments was corrected for ties, number of punishments by diagnosis remained highly significant ($X^2 = 13.59, p < .009$). It was strongly suggested that patients in different psychiatric diagnostic groups were from differ-

TABLE 3. Ages of the Patients Broken Down by Diagnosis				
Diagnosis	Mean	Standard Deviation	N	F
Neurotic or Psychophysiological	25.69	6.53	23	3.49*
Personality Disorder	22.49	7.88	121	
Situational Adjustment Reaction	25.32	5.49	56	
Psychotic, Organic, or Special Symptoms	23.70	5.51	60	
No Psychiatric Diagnosis	22.50	3.54	80	
*p < .008 (df = 4,332)				

TABLE 4. Months of Completed Service Broken Down by Diagnosis				
Diagnosis	Mean	Standard Deviation	N	F
Neurotic or Psychophysiological	71.13	81.75	23	3.16*
Personality Disorder	41.93	55.61	121	
Situational Adjustment Reaction	65.05	57.88	56	
Psychotic, Organic, or Special Symptoms	59.08	65.76	60	
No Psychiatric Diagnosis	41.87	38.30	80	
3.16*				
*p<.01 (df = 4,332)				

ent populations.

Age was found to be significantly related to diagnosis [$F(4,332) = 3.49, p < .008$]. Younger patients were less likely to receive a mental disorder diagnosis than older patients. Table 3 presents the mean ages and standard deviations among specific diagnostic categories. In those cases where younger patients were given a psychiatric diagnosis, the diagnosis tended to be personality disorder.

When corrected for ties, age by diagnosis remained significant ($X^2 = 28.91, p < .0001$). The age differences among the diagnostic categories represented genuine population differences. It was strongly suggested that the different diagnostic categories did indeed represent different populations.

Length of completed services was significantly related to diagnosis [$F(4,332) = 3.16, p < .01$]. Those with more completed service time

were more likely to receive a psychiatric diagnosis. Table 4 presents the mean months of completed service and standard deviations for the specific diagnostic categories. Of those given a psychiatric diagnosis, neurotic or psychophysiological patients had the greatest months of completed service. Patients diagnosed personality disorder had the least average months of completed service.

When corrected for ties, length of completed service by diagnosis remained highly significant ($X^2 = 19.97, p < .001$). There was strong evidence to support the notion that the differences in completed service among the different diagnostic groups did not represent merely chance variations.

Discussion

The results of this study suggests that knowledge of the educational level of the patient, the age of the patient, the length of completed service, and the number of judicial and nonjudicial punishments aid the evaluator in his attempt to reach a psychiatric diagnosis.

The patients included in this

study were selected randomly, yet 121 of the 340 patients were diagnosed personality disorder. Only 23 were diagnosed neurotic or psychophysiological. One may think that more patients would have been diagnosed neurotic than was actually the case since twice the proportion of neurotics is seen in Hawaii public mental health services (State of Hawaii, Department of Health Statistical Report, 1978). The proportion of diagnosed personality disorder patients in the military was compared to those seen in civilian life (State of Hawaii, Department of Health Statistical Report, 1978). There was proportionately over twice the percentage of cases diagnosed as personality disorders in the military but no firm conclusion can be reached since age, race, and sex differences are markedly different between the populations. Also severely ill, chronic, non-character disorder patients would have been screened from joining the military.

The senior author feels that frequently the mental health clinics are seen to be an avenue by which a patient with a personality disorder

may obtain a recommendation for an administrative discharge. In this study of 340 patients, 121 of whom had diagnosed personality disorders, only 27 (7.9 percent) were recommended for separation. This suggests that the Navy Mental Health Clinic rarely recommends a patient for separation from the service.

Finally, although five different evaluators were involved in the interview of the patient sample included in this study, the diagnostic groups remained significantly different on the independent variables examined. The findings above lend validity to the diagnostic procedures used by the different evaluators and, conversely, since the relationships found were not dependent upon the peculiarities of one or two evaluators, the findings can more likely be generalized to other military populations.

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Twelve Freed Americans Treated by Navy Psychiatrists

CAPT N.S. Howard, MC, CAPT R.H. Rahe, MC, and CAPT H.J. Sears, MC, were part of a Department of State interagency medical team sent to West Germany to receive and treat the freed American hostages. As part of the advance team, Dr. Howard, Director of Mental Health and Behavioral Science at BUMED, flew to Algiers to meet the former hostages and accompanied them to the U.S. Air Force Hospital in Wiesbaden. Nine Marines and three Navymen were among the 52 Americans released on 20 January.

An in-depth interview with Dr. Howard will appear in the March issue of U.S. NAVY MEDICINE.

Near Fatal Jellyfish Sting

LT William C. Moore, NC, USN

The effects of stings from jellyfish and Portuguese men-of-war have been reported in the literature to include mild dermatitis to almost instant death. (1) The tentacles of the jellyfish contain hundreds of thousands of venomous nematocysts located in the cnidoblasts in the superficial epithelium toxin. (2,3) The pain induced by these creatures may be produced by histamine, histamine releasers, serotonin, kinins, or prostoglandins. (4) According to Reid, stings from most jellyfish, other than the box jellyfish or sea wasp, rarely cause anything other than local swelling of short duration. (5) The sea wasp, or cubomedusan, has been responsible for several deaths in Australia. (6) (See "Sea Wasp Incident," *U.S. Navy Medicine*, January 1980, p 22)

A four-year-old white male with a previous history of bee sensitivity was wading in the South China Sea at the Officer's Beach, Naval Air Station, Cubi Point, Republic of the Philippines on 21 Jan 1979. While wading in approximately two feet of water, a jellyfish wrapped its tentacles around his right leg from the ankle to mid-thigh. The child immediately let out a scream that was heard all over the beach. Within 60 seconds, the child went from this hysterical state to cardiac arrest.

The panic-stricken parents grabbed the child and rushed to their vehicle. The author intervened and quickly assessed the child. There was no pulse, no respirations, dilated pupils, unconsciousness, and cyanosis. Approximately two minutes post-sting, CPR commenced in the front seat of the parents' pickup truck. The cyanosis quickly disappeared, but the heart did not beat for approximately five minutes. With the restoration of the heart beat, spontaneous respirations and consciousness followed. The pre-arrest hysteria occurred at this time also.

The patient was seen by a pediatrician in the emergency room, NRMC Subic, and was admitted overnight for observation and treatment of the local effects of the sting. He was discharged the next day in good condition with minor swelling of the right leg.

Strauss and Orris have developed the following protocol for jellyfish stings:

First: Immediately inactivate the nematocysts by rinsing the involved area with a liquid that has a high alcohol content, i.e. rubbing alcohol, methyl alcohol, etc. Application of meat tenderizers (e.g., Adolph's) at this stage may be equally effective.

Second: Remove the residual tentacles by coalescing them with a drying agent such as flour, baking soda, diver's talc, etc. and then scraping the paste from the skin with a blade. Fresh water, sand, and abrasive cloths should not be used, since these agents can irritate undischarged nematocysts and cause further release of toxins.

Third: Rinse the wound with basic solutions like baking soda or dilute ammonia hydroxide, in order to neutralize the toxins which are acidic. (7)

It is with great regret that the offending species was not identified. Had the offending organism been a sea wasp, the entire population using the beach was at risk. If the jellyfish was not a sea wasp, perhaps the violent reaction was due to the victim's hypersensitivity to bee stings. If the latter is true, those persons with histories of hypersensitivities to bee stings must be warned not to enter these waters during the jellyfish season.

Naval regional medical center commanders, environmental health specialists, special services officers, and public affairs officers must work together to disseminate information pertinent to jellyfish injuries prior to the season to protect personnel and prevent incidents as described above from occurring. These people must also be willing to close the beach if necessary. Lifeguard stations should possess the materials necessary to neutralize the toxins, and lifeguards must know how to treat these injuries.

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LT Moore is a staff nurse anesthetist, NRMC Great Lakes, IL 60088.

Troubleshooting the "Bad Mix" of Amalgam

CDR Richard H. Harper, DC, USN

The dentist has completed the cavity preparation, used the appropriate base, and placed the matrix. The dental assistant puts the mercury and alloy into the capsule, triturates them, and then says, "Another bad mix, doctor."

This scene, played out daily in hundreds of dental offices, ends in lost time and wasted amalgam. Worst of all, if the improperly mixed material is put into the preparation, the result is an inferior restoration for the patient.

Textbooks on dental materials(1,2) agree that a clinically acceptable amalgam can be obtained only if certain criteria involving proportioning and trituration are met. Too often, in a busy dental practice, one or more of these factors is overlooked, resulting in an inferior amalgam. When the amalgam is not clinically acceptable, the dentist and dental assistant should consider each of the following areas rather than merely hoping the next amalgam mix will be more acceptable.

Alloy Dispenser and Alloy Pellets

Although disposable predosed capsules are available, rising silver prices and the poor mercury/alloy ratios of a number of these capsules(3) have led many practitioners to employ alloy pellets in reusable capsules.

When a poor mix is obtained time after time, the operator tends to feel the manufacturer of the pellet may be at fault. This is hardly ever the case, for these alloy pellets must meet and pass rigid specifications concerning weight, size, composition, and packaging. A pellet that is chipped or broken may be found, but this is rare. Usually the problem lies with the way the dentist or dental assistant handles the material.

If a dispenser is used, the dental assistant should be sure that it is designed for the type of pellet in use in the operatory. A number of dentists use both spherical and lathe-cut alloys in daily practice. Because these pellets differ in diameter, placing them in a dispenser other than the one recommended by the manufacturer could mean that no pellets are dispensed or that pellets are dispensed and triturated with an inordinate amount of mercury, resulting in a wet mix. Occasionally, the operator expects two pellets to be dispensed from a dispenser that actually contains only one pellet, again

resulting in a wet mix. Many practitioners avoid these problems by not using a dispenser. Instead, they place the pellets in a marked, closable container and put them into the capsule by cotton tweezers before placing the mercury and triturating.

As is stated in section 3.5.2 of American Dental Association Specification No. 1 for Alloy for Dental Amalgam, (4) 0.6 grams of alloy and the recommended amount of mercury are triturated for testing. Because producers manufacture capsules to meet this requirement, it is recommended that no more than two pellets (lathe-cut) and the proper amount of mercury be triturated. Some spherical pellets such as Caulk Spherical Alloy* are smaller than the lathe-cut type, and three of these pellets can be used.

Mercury and Mercury Dispenser

Manufacturers' directions specify the amount of mercury that, when combined with their alloys and triturated, will produce an optimum mix. This ratio of mercury to alloy is based on extensive research and will enable the clinician to place an amalgam restoration that will give the patient lifetime service if it is properly maintained.

Because properly mixed amalgam contains little excess mercury, it is necessary that the proper amount of mercury be dispensed. Unless you are using predosed capsules or a dispenser that is designed to dispense both pellet and mercury accurately each time, the proper amount of mercury will be obtained if you use the appropriate insert in your mercury dispenser. Questions regarding the proper insert can quickly be answered by referring to the manufacturer's instructions contained in each alloy package. This insures an ideal mercury/alloy ratio and eliminates the need to squeeze the amalgam after trituration. This not only excludes the variables that cause a wet or dry mix, but also considerably reduces the level of mercury vapor in the operatory.

Dr. Harper is on the staff of the National Naval Dental Center Bethesda, MD 20014.

*The L.D. Caulk Company, Division of Dentsply International, Inc., Milford, DE.

It is important that the mercury dispenser be filled to an acceptable level and that it be held perpendicular to the capsule when dispensing the mercury. If this dispenser procedure is not followed, sufficient mercury may not be dispensed and the mix will be dry. Often the mix is dry because the insert is not tightly screwed into the dispenser. Constant use of the dispenser may cause the insert to become loose.

Capsules

Alloys that are to be certified for use by the dental profession must meet rigid testing standards established by the Council of Dental Materials and Devices of the American Dental Association. Once an alloy has been granted the "certified" label, it is important for the dentist to handle the material in a manner similar to that in which it was tested and to use the capsule and pestle recommended by the manufacturer. By not doing so, you fail to make the best use of the amalgam.

A clean capsule is necessary for each mixture of alloy and mercury. Using a capsule containing a residue of set amalgam may result in a dry and lumpy mix. A good technique is to remove the pestle after trituration and place the capsule back on the amalgamator for 1-2 seconds. The amalgam will accumulate into one mass and there will be no residue in the capsule.

Trituration Times

The manufacturer's recommendations regarding trituration times are enclosed with each package of alloy pellets. These values have been established after much testing. It is a mistake to alter these recommendations and opt for a dryer or wetter mix because it "feels" right. Too often the dentist evaluates a freshly mixed amalgam by comparing it with the mercury-rich

amalgam of preclinical dental school experience. This amalgam was what the instructor felt was a "good" mix after excess mercury (whatever that was!) had been squeezed out.

Amalgamators

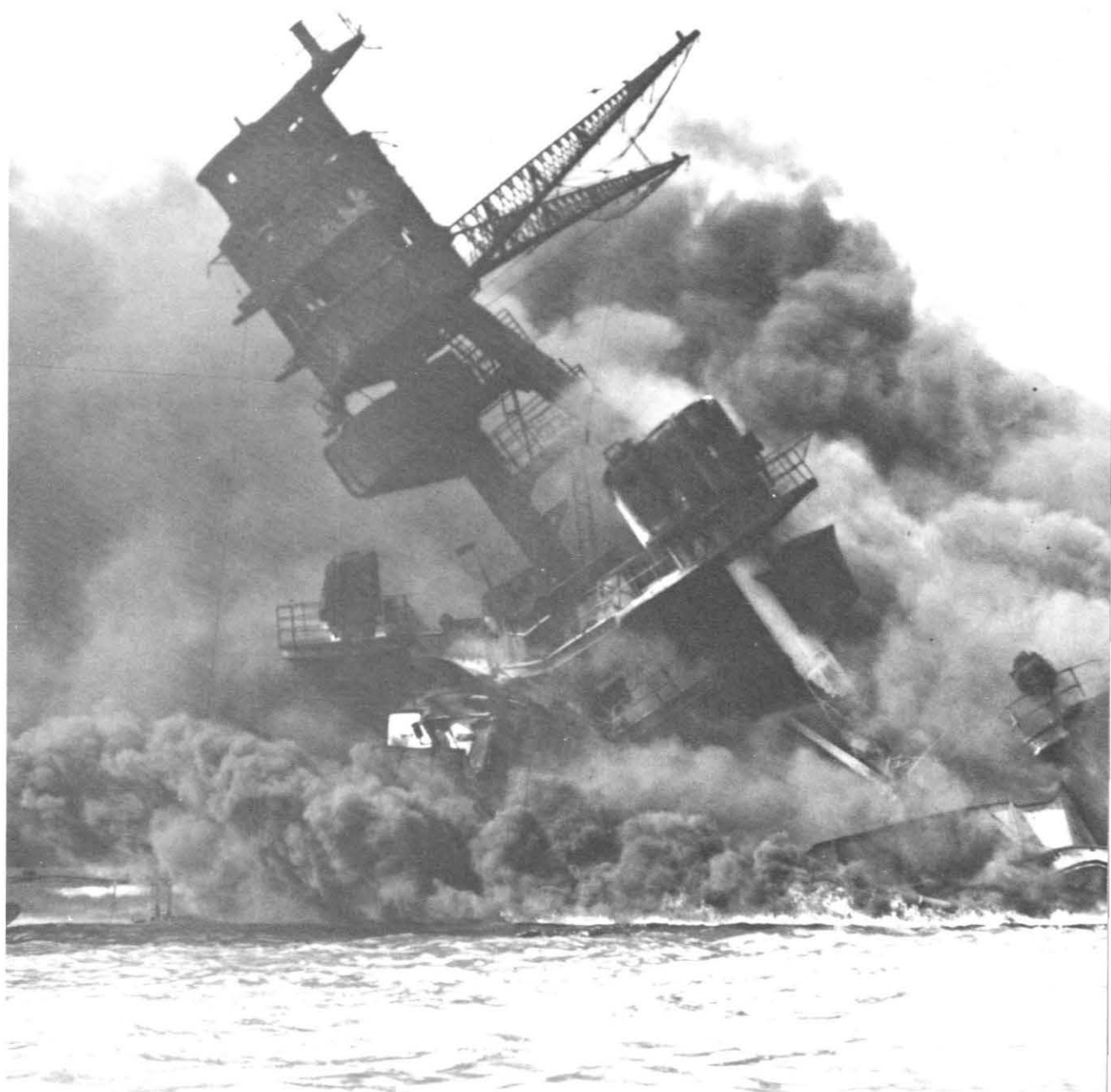
Recent investigations by Navy Dental Corps operative dentistry consultants in several regional dental centers have shown that many of the amalgamators in use have large variations in their trituration speeds (cycles/minute). One example of this the Caulk Vari-Mix II amalgamator.* The recommended speed for the M-2 setting is $3,600 \pm 200$ cycles/minute. Many amalgamators in the clinics had speeds ranging from 3,000 to 5,800 cycles/minute. Such extreme variations would certainly contribute to an unacceptable amalgam. The speeds of frequently used amalgamators should be checked at regular intervals and recalibrated if necessary.

If you follow the above recommendations and review them quickly when you encounter a "bad" mix, the problem will be solved.

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*The L.D. Caulk Company, Division of Dentsply International, Inc., Milford, DE.



7 December 1941

39 Years Ago

Navy Dentists at Pearl Harbor

On 7 Dec 1941, the dental clinic at the Navy Yard, Pearl Harbor, HI, had a complement of 10 Navy dental officers. One of the dental officers present on that day was LCDR R.P. Irons. Dr. Irons was standing a telephone watch while residing in Honolulu and was first notified of the Japanese attack by an Army officer friend. Dr. Irons, assisted by his wife, notified all dental officers to report immediately to the Yard clinic. Dr. Irons provided the following account of his experiences as reported in a monograph entitled "A General Survey of the U.S. Naval Dental Corps in World War II," published by the Office of Naval Research, Washington, DC, in 1951.

"We arrived at around 0900 and assisted in the care of the wounded, as they arrived at the dispensary. The dental technicians were sent out on rescue teams to various ships and areas in the harbor, and performed outstanding service. All personnel remained at the dispensary constantly for the next two weeks and were able to continue the practice of dentistry on the second day following the attack. To relieve the medical officers of some watches, the Dental Department took over the watches from 2000 to 0600 on 8 Dec 1941, and continued for two weeks. No dental officer performed any outstanding service above his fellow officers and by the same token no dental officer shirked his duty.

"Dental officers from ships

that were sunk, reported and the complement was increased to 12 or 14, where it remained for many months. Some officers that reported were further ordered to ships leaving port, Marine detachments, and outlying islands, with portable equipment. With this number of officers a seven-day work week was started which permitted them to have every fourth day off. There were 14 dental corpsmen on duty, seven of which were engaged in prosthetics.

"Immediately following 7 Dec 1941, the demand for dental prosthetics increased, some 200 dentures having been lost by of-

ficers and men during the attack. Some of these were lost in the ships that were sunk, a large majority were lost in the oil-covered water when the wearers became sick. The prosthetic department was able to replace these dentures for these patients within three months."

Two Navy Dental Corps officers were killed and four others wounded when the Japanese naval forces attacked Pearl Harbor. These dental officers, both Regular and Reserve, symbolized the dedication of the dental officers and technicians in fulfillment of their operational and contingency missions.



Pearl Harbor Navy Yard Dental Clinic as it appeared during WWII.

NOTES & ANNOUNCEMENTS

IN MEMORIAM

CAPT *Attila Felsoory*, MC, USNR-R, former neurosurgeon and staff medical officer at the Naval Reserve Readiness Command Region 19, San Diego, CA, died 1 Oct 1980. He was 47 years old.

Born in Budapest, Hungary, on 6 March 1933, Dr. Felsoory attended high school in Passau, Germany, from 1946 to 1951. Arriving in the United States in 1951, he enrolled at Calvin College in Grand Rapids, MI, where he received his B.S. degree. He attended medical school at Wayne State University of Medicine in Detroit, and returned to Grand Rapids for his internship and residency at Blodgett Memorial Hospital.

Dr. Felsoory was commissioned a lieutenant (junior grade) in the Naval Reserve in December 1959. His duty assignments included Ship Surgeon on the USS *Bennington* (CVS 20) and USS *Oriskany* (CV 34); Commanding Officer, Naval Regional Medical Company 11-1; Commanding Officer, Naval Regional Medical Center 5819, Encino; and staff medical officer for the Readiness Command in 1976.

During the period he served as staff medical officer, Dr. Felsoory was honored with the Meritorious Service Medal and the Navy Commendation Medal.

Dr. Felsoory was involved in the development of refined techniques in the neurosurgical control of intractable pain and co-authored many articles on this subject.

CAPT *Charles F. Gell*, MC, USN (Ret.), former Navy physician who specialized in aviation physiology and aerospace medicine, died 26 Dec 1980 at NNMC Bethesda, MD. He was 73 years old.

Born in Chicago, IL, Dr. Gell graduated from Loyola University, Chicago, in 1934 and received his M.D. from the same university in 1936. Dr. Gell did graduate work in physiology at the University of Pennsylvania's Graduate School of Medicine, earning his M.S. degree in 1953.

During his 23-year naval career, Dr. Gell served as Head of the physiology and nuclear medicine departments at the School of Aviation, Pensacola, FL; Director, Naval Aviation Medical Acceleration Laboratory, Johnsville, PA; and as Director, Naval Crew Equipment Laboratory, Philadelphia, PA. Dr. Gell had sea duty as senior medical officer, flight surgeon, and naval aviator aboard USS *Saratoga* and USS *Monterey*. His last assignment before retiring from the Navy in

1960, was Special Assistant for medicine and applied sciences in the Office of Naval Research, Washington, DC.

Dr. Gell wrote more than 60 articles on physiology and aviation medicine, space flight problems, aeronautics, and astronautics for professional journals.

OCCUPATIONAL HEALTH WORKSHOP

The Navy Environmental Health Center will sponsor its 23rd Navy Occupational Health Workshop from 16-20 March 1981 at the Cavalier Hotel, Virginia Beach, VA. Pre-workshop courses are scheduled for 14-15 March 1981.

The workshop will provide technical assistance and professional updates in occupational and preventive medicine and offer a forum for the exchange of information and ideas. Occupational and preventive medicine personnel are invited and encouraged to attend. There is no registration fee.

For additional information on the workshop and program sessions, contact: Navy Environmental Health Center, Naval Station, Bldg. X-353, ATTN: 00A, Norfolk, VA 23511. Telephone: Autovon 690-4657, Commercial (804) 444-4657, FTS 954-4657.

11TH ANNUAL NEUROSURGERY POSTGRADUATE COURSE AND THE 5TH ANNUAL NEUROSURGICAL NURSES' CONFERENCE

The course held by the University of California, San Francisco will be held 21-23 May 1981 at the San Francisco Hilton Hotel. This course will provide an update on selected topics in clinical neurosurgery by a distinguished faculty. Pain, intracranial surgery, pediatric neurosurgery, and craniocerebral trauma will be discussed in depth. Current concepts will be stressed.

This course is presented by the Department of Neurosurgery of the University of California School of Medicine in San Francisco, and is sponsored by Extended Programs in Medical Education. The program is approved for AMA/CMA Category I credit and for nursing continuing education credit toward relicensure.

For further information, please contact: Extended Programs in Medical Education, Room 569-U, University of California, San Francisco, CA 94143. Telephone: (415) 666-4251.

BUMED SITREP

MEDICAL BOARDS

Medical boards received in the Bureau of Medicine and Surgery for departmental review are occasionally noted to be in noncompliance with article 18-8 of the Manual of the Medical Department which outlines requirements of composition of medical boards under various circumstances. The most common error or oversight in medical board membership appears in cases of reservists. When the party before a medical board is a reservist, membership of a board must include a reservist, if available. Otherwise, convening authorities must so state the unavailability of a reservist in their endorsement to the board. It is requested that particular attention be given to the status of members (USN/USNR, USMC/USMCR) which must be correctly reflected on the Medical Board Cover Sheet.

The recently revised Medical Board Report Cover Sheet (NAVMED 6100/1), has been distributed and is being used by a number of Navy medical facilities. There are only a few minor changes in format of the new cover sheet. Most numbered blocks are self-explanatory and are adequately described in article 18-24, MANMED. It appears that block 16 "Indicated Disposition" may cause some confusion. On second and subsequent medical boards recommending additional periods of limited duty, "7" Return to Limited Duty should be indicated in block 16 rather than "8" Departmental Review, even though departmental review is required on second and subsequent boards. As in the past, please continue to indicate the number of months of limited duty recommended by typing 6, 12, permanent, etc., in block 16.

VD NATIONAL HOT LINE

Commanding officers, primary care physicians, and infectious disease specialists may wish to note and disseminate information on the "Venereal Disease National Hot Line." This effort is sponsored by the American Social Health Association with funding from the Center for Disease Control. Interested patients or potential patients may reach the hot line through the following toll free numbers.

- California (800) 982-2883
- Remainder of the United States (800) 227-8922

Further information may be obtained from the American Social Health Association, 260 Sheraton Avenue, Palo Alto, CA 94306, Telephone (415) 327-6465.

MOST LOSE CHAMPUS BENEFITS

Are you 65 or over? Do you have a spouse in this age group? Is a member of your family disabled or suffering from chronic kidney disease?

A "yes" answer to any of these questions means you should keep yourself well informed on the effect Medicare entitlement has on CHAMPUS benefits.

By law, retirees, spouses, and children of retirees, and spouses and children of deceased service members (active duty or retired) lose eligibility for CHAMPUS when they become entitled to Medicare's Hospital Insurance (Part A).

CHAMPUS eligibility continues for any active duty member dependent who becomes entitled to Medicare, but Medicare becomes primary (first) payor and CHAMPUS secondary payor.

Medicare is the Social Security Administration's health insurance program for people 65 years of age or older and for some people under 65 who have a disability or chronic kidney condition. It has two parts:

- Hospital Insurance, called Part A
- Medical Insurance, called Part B

Medicare's Hospital Insurance (Part A): If you are entitled to Social Security cash benefits you get Part A automatically and there is no premium. Also, at this time you lose eligibility for CHAMPUS unless you are the spouse or child of an active duty member.

Medicare's Medical Insurance (Part B): Part B covers physician's services and other expenses not covered by the Hospital Insurance. There is a premium for Part B and anyone who becomes entitled to Part A is automatically signed up for Part B unless the individual notifies Social Security in writing that he/she does not wish to sign up for this part of Medicare. If an individual chooses not to sign up for Medicare Part B when initially eligible, he/she may subsequently sign up but only during the annual open enrollment period and there is a premium penalty.

Detailed information about Medicare can be obtained from any local office of the Social Security Administration. There is a CHAMPUS Fact Sheet available on this subject which can be obtained from the Health Benefits Advisor at a Uniformed Service medical facility, or by writing OCHAMPUS or the CHAMPUS Fiscal Intermediary serving your area. If you or a member of your family expect to become entitled to Medicare in the near future, you need to know how you will be affected and what the Medicare benefit will be.

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